

542,652

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number  
WO 2005/002092 A2

(51) International Patent Classification<sup>7</sup>: H04B 10/00 (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number: PCT/JP2004/009495

(22) International Filing Date: 29 June 2004 (29.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 2003-186808 30 June 2003 (30.06.2003) JP

(71) Applicant (for all designated States except US): MAT-SUSHITA ELECTRIC INDUSTRIAL CO., LTD. [JP/JP]; 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SHIOZAKI, Toru. FUSE, Masaru.

(74) Agent: OGASAWARA, Shiro; Daisan-Longev' Bldg., 3-11, Enokicho, Suita-shi, Osaka 564-0053 (JP).

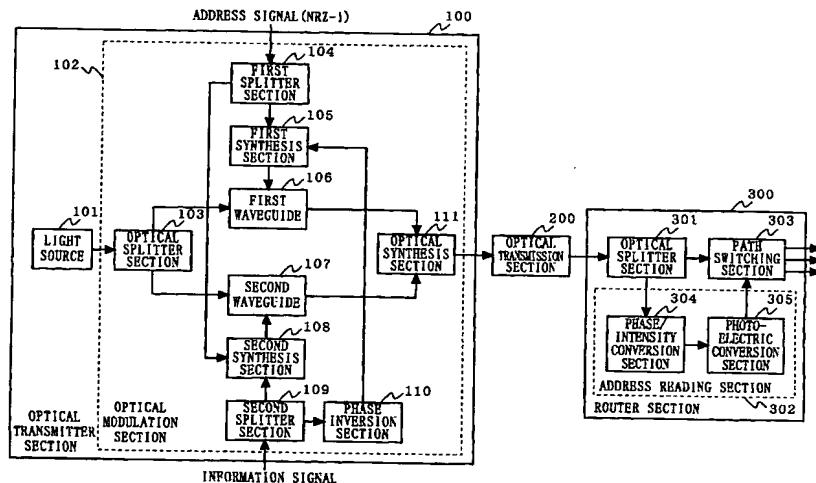
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: OPTICAL PACKET EXCHANGER



(57) Abstract: An optical packet exchanger is provided which, in a situation where a transmission path for an optical packet is to be switched by using an address signal, prevents the transmittable capacity for the information signal from being decreased, and which facilitates the extraction of the address signal even if the modulation speed for the information signal becomes high. An optical modulation section 102 outputs an optical packet obtained by subjecting output light from a light source 101 to an intensity modulation using an information signal and a phase modulation using an address signal corresponding to a transmission destination for the information signal. An optical splitter section 301 splits the optical packet received via the optical transmission section 200 into two optical packets. An address reading section 302 reads the address signal from the phase of one of the optical packets output from the optical splitter section 301. Based on the address signal output from the address reading section 302, a path switching section 303 determines an output port for the other optical packet.

WO 2005/002092 A2